

Meeting: 1002, Pittsburgh, Pennsylvania, SS 5A, Special Session on Multiscale Algorithms in Computational Fluid Dynamics

1002-76-167 **A. J. Meir*** (ajm@math.auburn.edu), Department of Mathematics and Statistics, Parker Hall, Auburn University, Auburn, AL 36849, and **P. G. Schmidt** (pgs@math.auburn.edu), Department of Mathematics and Statistics, Parker Hall, Auburn University, Auburn, AL 36849. *Advances in MHD Flow Simulations.*

MHD (magnetohydrodynamic) flows are of importance in connection with many engineering applications, specifically in metallurgy and materials processing. In this talk we describe some new results for the finite-element simulation of MHD flows. (Received September 13, 2004)